
**ADDIS ABABA UNIVERSITY**

**COLLEGE OF NATURAL AND COMPUTATIONAL SCIENCES**

**SCHOOL OF INFORMATION SCIENCE**

# IDENTIFICATION OF INFORMATION SEEKING BEHAVIOUR: IN CASE OF ETHIO TELECOM CUSTOMERS

By

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February,2021
ADDIS ABABA, ETHIOPIA


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# IDENTIFICATION OF INFORMATION SEEKING BEHAVIOUR: IN CASE OF ETHIO TELECOM CUSTOMERS

A Thesis Submitted to School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Science in Information Science and Systems (*Information science Specialization*)

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February, 2021

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By: Mulunesh Belew

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| Examiner | Signature | Date |

# Declaration

This thesis has not previously been accepted for any degree and is not being concurrently submitted in candidature for any degree in any university.

I declare that this thesis entitled IDENTIFICATION OF INFORMATION SEEKING BEHAVIOUR: IN CASE OF ETHIO TELECOM CUSTOMERS is a result of my own investigation, except where otherwise stated. I have undertaken the study independently with the guidance and support of my research advisor. Other sources are acknowledged by citations giving explicit references. A list of references is appended.

Signature: _____

Mulunesh Belew

This thesis has been submitted for examination with my approval as university advisor.

Advisor's Signature: _____

Daniel Alemneh (PhD)

# DEDICATION

**I would like to dedicate this thesis work to my newly born child, Konne  Fisseha Ambelu.**

# ACKNOWLEDGEMENTS

Firstof all, I would like to thank Almighty God for reasons too numerous to mention. Next,I would like to thank my advisor Dr. Daniel Alemneh for his unreserved encouragement and in valuable comments. I would like to thank my husband Dr. Fisseha Ambelu he scarifies all possibilities to me from beginning to the end. I would like to thank my brother Gebeyaw Ambelu (phD) for his unreserved support. Last but not least, my special thanks goes to Getye Dejenu(PhD Candidate).

# Abstract

*The aim of this study is examine the information need and information-seeking behaviour of Ethio telecom customers based in Bahir Dar town. A structured questionnaire was used to collect pertinent data from sample respondents. A total of 385 sample respondents were recruited using a systematic random sampling technique. The mean and standard deviation andcross-tabulation were used to test the relationship between dependent (Types of information needed,Source of information and Challenges encountered when seeking for Information) and independent variables (demographic characterstics of respondents and customer relationship with the company). Data were collected through personal-administered questionnaire. Descriptive analysis results revealed that website and contact centre are preferred information channels, but self-care application, IVR and mass media are not preferred. Interms of information need ethio telecom customers in Bahir dar town need information about almost all kind of products except Domain Name System, FAX, VPN and CRBT service. Availability of information sources, Lack of awareness about source of information, Reliability of credibility of the information source, Ability of sources to meet information, Affordability of the information sources, Difficulty in accessing both print and online material, Lack of accessibility of sources, Lack of time, Inadequate current information material were found as Challenges encountered when seeking for Information.*



*Keywords: information need, information-seeking behaviour, information seeking, Ethio telecom, customer*.

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# LIST OF ACRONYMS

**IVR** **Interactive Voice Response**

**VPN** **Virtual Private Network**

**IT** **Information Technology**

**DNS** **Domain Name System**

# CHAPTER ONE

# 1. INTRODUCTION

## 1.1. Background of the study

Information need and information seeking behaviourforms an important research topic in Ethiopia and beyond.Information need and information seeking behaviour study helps to find out the sources and services used by the information seeker (Science et al., 2014).

In an organisation the search for information by a person is seldom an end in itself;instead, it is part of a process of decision making, problem solving, planning, resource allocation, etc. in other words, it is one aspect of the overall process of system management. Kuruppu (1999)noted that information seeking has to be studied within an organisational context or a particular process. Information seeking is a complex process. The type of information, methods of seeking informationand the criteria for selection vary with the time and context.This study intends to explore organisation services and products delivery channales and need of the customer .

## 1.2 About Ethio Telecom

Telecommunication service was introduced first in Ethiopia in 1894 with the construction of the telephone line from Harare to the capital city, Addis Ababa (Finfinnee).Very recently, recognising the developmental role of telecommunication services, theEthiopian government alluded emphasis on improving telecommunication services(Daniel, 2015).The Ethio telecom was established on December 2010 by the decision of the government of Federal Democratic Republic of Ethiopia to transform the previous traditionally operating corporation (ETC) with a vision to be a world-class telecom operator. Ethio telecom provides different kinds of products and services all over the country and acts as a sole service provider.It is the only telecom service provider in Ethiopia. Due to its monopolisation,it imports all telecom products,includingvoucher cards (VCs) and SIM cards,whereas the distribution involves other business partners (Bezabh, 2017).

Upon the release of Six Month Performance Report, Ethio telecom able to note that most of media organisations have been puzzling about the number of mobile subscribers. The major

concern was on the 2010 Ethiopian Fiscal year report that states the number of subscribersas 65.7Million withoutexcluding 22.26 million deactivate and 8 million idle numbers.The report should have indicated only active mobile users which were 35.44 million(ethio telecom web site,2010).

At the beginning of 2010 budget year, Ethio telecom announced its plan of mass data clearing and recycling of mobile numbers that have not been used for more than two years. Accordingly, Ethio telecom cleared 18.4 million numbers from its system following the International Telecommunication Union (ITU) standard. These cleared mobile numbers have been recycled and made ready for sale since 21 December 2018.

In addition, by applying a SIM Card life cycle management rules, the company cleared close to 4 million mobile numbers while additional numbers are under consideration. In a nutshell, the 39.54 millionis the exact enterprise and residential mobile customers in the system out of which 4.17 million have joined the service in the first half-year of 2010.

Now a day's Ethio telecom is massively expanding its services and products.The newly added products are: (1)Hybrid SIM Account– it is a service that enables customers to use a post-paid and prepaid account with a single SIM Cards. (2) Very Small Aperture Terminal (VSAT)- a satellite communications system that serves business users. (3)Virtual Private Network Service - a network that is constructed using public wires to connect remote users or regional offices to an internal. (4)Business Mobilewhich is a bundled post-paid mobile service that allows all post-paid mobile customers to make calls at a discounted rate. (5)Mobile Broadband VPNthat is an extension of VPN to the mobile broadband access. (6)Fixed Broadband VPNwhich uses wired or fixed wireless options to connect telecommunication branches. (7) A Virtual private network- is a service that enables secured communications inside an organisation). (8) Business Internetservice is wired and wireless connections with a speed starting from 256 Kbps to the business community. (9)Machine to Machine (M2M) wireless technologythat enables machines to talk to each other and which users can access directly from theiroffice's or home's computer. (10)FAX, (11)Prepaid Mobile- A prepaid mobile is a mobile service which credit is purchased in advance of service use. (12)Asymmetric Digital Subscriber Line (ADSL) is a data communications technology that enables faster data transmission over copper lines). Domain Name Service, roaming , Post-paid Mobile (Post-paid mobile is a mobile service which is billed after the fact according to their use of mobile services at the end of each month.), EVDO, Mobile Internet, Public IP Address.

Starting from the time of establishment, Ethio telecom did different studies on customer satisfaction to improve service quality and to make the company preferable.

Ethiotelecom is working to the objectives of being a customer centredcompany, offering the best quality of services, being a financially dominant company, and meeting excellent standards (Public Relations of the Ethio telecom, 2010).

## 1.3 Statement of the problem

Information seeking refers to information need, patterns and various methods of locating and searching for information, evaluation, and use of information by users (Yusuf, 2012). Fundamentally it refers to the information gathering habits and approaches of patrons of the library. The information seeking behaviour is a manner in which a user conducts himself in relation to a given information environment.

Most educational institutions and business enterprises have studied about students and customers information need and information searching behaviour. Many authors like Ajiboye(2007),Kadir et al.,(2018) and Kakai et al., (2004)underline that service providers must understand the information needs of their customers in order to address those needs. A study conducted by Pradip and Nikose(2000),on information seeking attitudes and of engineering college libraries users shows that users have been shown more affection to the formal collection in libraries as well as the information seeking from electronic resources with internet has given more preference.

Willson (1999)noted that information-seeking behaviour includes those activities a person may engage in when identifying their own needs for information, searching for such information in any way, and using or transferring that information.Kakai (2004) have defined information-seeking behaviour as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating, and development. Information seeking behaviour of students, researchers, and professors has been the focus of enquiry for decades. However, much of user studies were conducted primarily to evaluate library collections.

These were followed by studies of the research habits of individuals or groups that would lead to the design of appropriate information systems and services. In mid-1980s, the focus shifted to holistic approaches to information seeking behaviour. Yet, further research on l information users and their information needs is critical in the age of the Internet (Line, 2000).

Undergraduate students in Makerere University are expected to maximally utilise the University Library as one of their major sources of information. However, othe studies conducted on library use in the sameUniversity suggest that students do not use most of the library information resources. It was assumed that students could be experiencing technical problems in accessing information resources; coupled with lack of knowledge and awareness of

the resources. The students' poor information seeking behaviour was singled out as the most prominent cause that needed investigation(Kakai et al., 2004).

Students in tertiary institutions of learning need information for their academic activities; this is a fact that cannot be taken for granted. It is important to note also that students/users must possess the requisite skills necessary to access online information resources. A well-articulated and sustained effort is required to provide ICT facilities in these institutions, making them more accessible to students for use. It is now a known fact that the Internet has facilities that support ICT and telecom professionals and institutions.

According to Daniel (2015) Ethio telecom mobile phone users in Ambo town face many system and information delivery related problems such as network problem, connection error, and mobile data service. According to the result of Daniel(2015) recommend some points to enable Ethio-telecom to improve quality of customer service and to get good customer satisfaction in problems. The goal of Ethio telecom is providing a reliable network and of improving customer service and of the company vision is to be a worled class telecom service provider but the company lack understanding of customer needs. The company still did not work to know the customer information seeking behavior to work on it's information delivery channals. to be worled class company first the company should work on customer satisfaction in terms of information delivery to do more accessable and to add subscribers in all kinds of service and products. As the researcher tried to review litratures most of the companys specialy accadamic institutions work on students information need and seeking behavior to provide information and reading materials based on their needs. On the same manner Ethio telecom needs to know about customers information need and seeking behavior. Currently as Ethiopian government decition, with in a short period of time other telecom companies will join Ethiopia to provide their service and products as a compitent of ethio telecom. So the above mentioned gap that means lack of awerness about customers information need and seeking behavior will lead the company low preferable with compare to others and it will be an obstacle to meet the company goal and vision, and also it will affect customer satisfaction. In light of this recognized gaps, the research was study the information seeking behavior of Ethio telecom customers that are residing in Bahirdar town.

# 1.4Motivation

There are two reasons motivate the researcher to do on this topic area. The first is as far as the researcher read there is a shortage of researches that are worked
on Telecommunication company's customers information need and seeking behavior, so the researcher stand to put contribution for next researcher.
The second reason is the researcher was an employee of Ethio telecom company on the division of customer service. It gave an opportunity to create contact with customers directly. Those customers came to the company in person for different kind of information. They get tired of coming in person for information that can easily be found on information delivery mechanisms of the company. So, the researcher motivated to know information need of customers
and prefer information channels to decrease the tired of customers by recommend the company to facilitate preferable information channels and information types.

# 1.5 Research questions

The study intends to answer the following research questions:

1. What are the information needs of Ethio telecom customers?
2. What kind of mechanism customers use to search information?
3. What are the barriers faced by Ethio telecom customers in seeking information?
4. What is the relationship between user profile and information need and seeking behaviour?

# 1.6 Objective

### 1.6.1 General Objective

The general objective of this research was to describe the information need and information seeking behaviour of Ethio telecom customers using Bahirdar Town as a case study.

### 1.6.2 Specific objectives

- To explore the information categoriesthat are provided by the company.
- To explore information sources of Ethio telecom customers.
- To investigate how customers searched for and use information about Ethio Telecom Company.
- To explore the challenges that customers encounter when seekinformation.
- To examine the impact of users profile with information need and seeking behaviour

## 1.7 Significance of the study

- It highlights the important sources used by customers and also the purpose of seeking information and the study is significant because it describes and analyses the information seeking behavior of customers that are live in bahirdar town.
- The finding from this study will also assist to improve the services offered to customers.
- The findings of this research provide useful practical information to all stakeholders in ICT and telecom, Particularly Ethio telecom and its customers might use the results of this study as learning curve towards improving the way to deliver information based on the customers need and information seeking behavior.
- It highlights the information seeking behavior of Ethio telecom customers and the challenges they face when seeking information.
- The study aimed to contribute to the growing literature on information-seeking behavior and to the researcher's knowledge in this area of study, ; there is no similar study that has been conducted in Bahir Dar.

## 1.8 Delimitation of the study

In Bahir Dar city there are many Ethio telecom customers, and it is difficult to collect data from representative sample size as it requires a considerablee amount of human, financial, material and time resources. Thus to make it manageable, the study is delimited to the company’s shops only.

# 2 LITERATURE REVIEW

## 2.2Introduction

This part of the study provides the literature outline specific to concepts or theoriesof information need and seeking behaviour. The relevant conceptual,theoretical andempirical literaturerelated to the study topic are reviewed and presented as follow.

### Definition of key terms

## 2.3 Information

Information is a sequence of symbols, and that can give a meaning when it is interpreted systematically. According to Madden(2000), information is a stored knowledge that can be obtained from a range of environmental stimuli and phenomenon. information can convey a message but it can be informative when it appropriately interpreted.

Information is described as processed or structured data. It is one of the essential commodities needed by the mankind in all walks of life. Information refers to the communication of knowledge about an event of a given condition or the spread of knowledge derived from observations, study or experience.

The word information is derived from the Latin word ‘Informatio’ which means to “to give form to mind’, ‘instruct’ or ‘teach’ (Doraswamy, 2017).

Kumar in 2017, on the other hand, documented that the word “information” was derived from the Latin stem of the nominative information. This noun is in its turn derived from the verb "informare". When the raw data is processed or value is added to it, data becomes information (Kumar, 2017).

Webster’s International Dictionary (1994) defines “Information” as

a. Facts or figures ready for communication or use as distinguished from incorporated in a formally organised branch of knowledge.

b. The process by which the form of an object of knowledge is impressed upon the apprehending mind so as to bring about the state of knowing.

Research in information behaviour has occupied information scientists before the term ‘information science’ was coined. We can take its origins back tothe Royal Society Scientific Information Conference of 1948, when a number of papers on the information behaviour of scientists and technologists were presented. Of course, the term information behaviour was not widely used in the papers,which were generally about document and library use, but the origins

are clearlythere. This was seven years before Chris Hanson (of Aslib) coined the term ‘information science’ and ten years before the establishment of the Institute ofInformation Scientists in the UK(the first professional society devoted to the field) (Bottle, 1997). Over the intervening period since the Royal Society Conference literally thousands of papers and research reports have been produced on user needs, information needs, and information-seeking behaviour.Throughout the period the one constant complaint of commentators has been thatresearchers have not built upon prior research in such a way as to cumulatea body of theory and empirical evidences that may serve as a starting point forfurther research.A number of reasons can be providedfor this situation: first, in the positivist tradition, quantitative research methods were adopted that were inappropriate tothe study of human behaviour: many things were counted, from the number ofvisits to libraries, to the number of personal subscriptions to journals and thenumber of items cited in papers.

A very little of this counting revealed insights of value for the development of theory or, indeed, of practice. Secondly, researchers in the field of information science seem generally to have ignored allied work inrelated areas that might offer more robust theoretical models of human behaviour (Wilson, 2000). Thirdly, general models of information behaviour have only begun to emerge very recently, and attract much attention,inthepast ten to fifteen years.

The situation is now changing as Wilson (1994) has suggested: the general adoption of qualitative methods (from the early 1970s in the UK) has resulted in workthat is in the wider tradition of the investigation of human behaviour and which,therefore, is more likely to find theories and models in the social sciences that canbe applied to the study of information behaviour. At the same time, the modelsand theories proposed by certain researchers (e.g. Dervin, Ellis, Kuhlthau,Wilson), have gained strength as they have been adopted as the basis for furtherresearch by other investigators.

## 2.4 Information Sources

Information source can be defined as a carrier of information that can provide knowledge (e.g. a person, a book, a search engine, etc.)(Kumar, 2014).

## 2.5 Information Need

According to Taylor (1962),the definition of information need as an actual but unexpected need of information.

Information need refers to individual user needs regarding information needed by each person. Information need is understood as evolving vague awareness of something from missing and as culminating in locating the information that contributes for understanding and meaning (Doraswamy, 2017).

## 2.6 Information seeking

Information seeking is a complex process because methods for seeking information, criteria for selection and the provided information itself all vary with time and context. in an organisation the search for information by a person is seldom an end in itself .information seeking has to be studied within an organisational context or a particular process(Kuruppu, 1999).

## 2.7 Information Seeking Behaviour

Information seeking behaviour refers to the way people search for and utilise information (Wessels,1990),Information behaviour of different groups of people is different (Taylor, 1991).Information Behaviour is the totality of human behaviour in relation to sources and channels of information, including both active and passive information seeking, and information use. It is searching of information to satisfy some need. It is purposive searching. To satisfy that need the individual needs to interact with manual or computer base system(Wilson, 2000).

Information seeking behaviour contain an individual's information need, seek information , evaluate and select information and use selected information to satisfy an individual's information need. So it has goal and purpose and the user needs to identify channels and sources preferred for retrieving information.(Padma et al, 2013)

Information behaviour is the study that includes

**a, Information Behaviour**: Totality of human behaviour in relation to sources and channels of information.

**b, Information Seeking Behaviour**: Information seeking behaviour is the purposive seeking for information as a consequence of a need to complete some goal.

**c, Information Search Behaviour**: The micro-level behaviour employed by the information searcher in interacting with information system of all kind.

**d, Information Use Behaviour**; this is comprises of mental and physical acts involved in incorporating information to existing knowledge base of a person (Wilson, 2000).

## 2.8 Models of Information Seeking Behaviour

A model may be described as a framework for thinking about a problem and may evolve into a statement of the relationships among theoretical propositions. Mostmodels in the general field of information behaviour are of the former variety:they are statements, often in the form of diagrams that attempt to describe an information seeking activity, the causes and consequences of that activity, or therelationships among stages in information seeking behaviour. Rarely do suchmodels advance to the stage of specifying relationships among theoretical propositions: rather, they are at a pre-theoretical stage, but may suggest relationshipsthat might be fruitful to explore or test.

**The Wilson model (1981)** says that information need perceived by an information seeker gives way for information seeking behaviour to occur. In order to satisfy the information need, the user demand for formal and informal information sources and systems. The demands lead him for either success or failure in getting required information. On success, the user gets his need be fully or partially be satisfied. On failure, the user restarts his search process. It was also explained that information seeking behaviour may involve other people through information exchange by means of passing the useful information to them as well as using the information by the seekers themselves.

**Wilson's second model (1996):** Features of the model are Activating Mechanisms for seeking information which are affected by the Intervening variables of six types: Psychological aspects, Demographic background, role related to social aspects, Environmental variable and Characteristics of role. This model recognises search behaviours: Passive attention, Passive search, Active search and ongoing search. The term in the model 'information processing and use implied that the information is evaluated to know its effectiveness on satisfying the need.

**The Krikelas model (1983)** is an early model and was cited widely. The model contains thirteen components. It is a general model that is applicable to ordinary life. In the model the twin actions namely information gathering and information giving are given at the top. The information gathering process is carried out based on the deferred needs which are kindled by an event or environment of the person who seeks information. The model shows that the gathered information is directed to memory or personal files.

**The Kuhlthau Model (1992)** is explained as follows Initiation: When a person comes to know the lack of knowledge or understanding, uncertainty is felt. Thoughts would be vague and action for seeking information would be initiated.

**Selection**: In this stage the uncertainty on the area, topic or problem is not cleared and the person with a brief optimism gets readies for exploration of the information.

**Exploration**: While exploring for information people will get doubt on the consistency of the information, confused on the compatibility and get frustrated in the process.

**Formulation**: In this stage the person gets focused perception which leads to clarity and the process of seeking for information gets continued Collection: The process of information seeking senses the right direction, information related to the focused perspective is gathered and it minimises the ambiguity of the information Presentation: After the completion of the search the seeker gets new knowledge which the person can present to others and put the knowledge to use.

**Assessment**: When the information seeker attains the required knowledge, seeker gets a sense of accomplishment and the self-awareness increases

**The Leckie's model (1996)** concentrates on professionals such as engineers, doctors and lawyers. This model features six factors connected by arrows flowing down from the top. When five factors are unidirectional one factor is bidirectional. According to this model the factor 'work role' enables 'tasks' to perform. The performance of the tasks creates information need. The model shows information seeking behaviour as a bidirectional arrow labelled as 'information is sought'. The factor termed as 'outcomes' is the end result which connects the factors 'source of information'. 'Awareness of information' and 'information is sought' through feedback arrows.

**Ellis model (1989**) Ellis's elaboration of the different behaviours involved in information seeking is not set out as a diagrammatic model and Ellis makes no claims to the effect that the different behaviours constitute a single set of stages; indeed, he uses the term 'features' rather than 'stages'.

**Starting**: the means employed by the user to begin seeking information, for example, asking some knowledgeable colleague;

**Chaining**: following footnotes and citations in known material or 'forward' chaining from known items through citation indexes;

**Browsing:** 'semi-directed or semi-structured searching'

**Differentiating**: using known differences in information sources as a way of filtering the amount of information obtained;

**Monitoring**: keeping up-to-date or current awareness searching;

**Extracting**: selectively identifying relevant material in an information source;

**Verifying**: checking the accuracy of information;

**Ending**: which may be defined as 'tying up loose ends' through a final search.

## 2.9 Review of Empirical Studies

Different scholar's studies information need and seeking behaviour of different user groups. The study conducted by Miriam , et al. (2004) investigated the information needs and seeking behaviour of undergraduate students of Makerere University. The studies mainly focus on To attain cost effectiveness in the university library services and promote the use of library information resources, this study sought to establish ways of improving the information–seeking behaviour of undergraduate students.

The finding shows that his main information demands that led undergraduate students into seeking for information include: course works and assignments, preparation for examinations and tests, general reading to enhance lecture notes, and class–group discussions. Seminars or preparation for workshops, tutorial presentations and dissertation research had a lower rating.

The findings revealed that Students have information need related to their studies. They mainly use text books as information source, followed by using departmental Book and then the University Library. Photocopying from colleagues took the fourth position, followed by using Internet sources, while the University Bookshop took the last position. Based on the finding textbooks were the most heavily use and the second frequently used resource is internet. It is because of lack of knowledge about the value of other resources and how to use it.Search strategies of undergraduate students in this university when seeking information is Starting (using lecturers), browsing (on the shelves), chaining (using references at the end of books), monitoring (using the card catalogue, library notice board display lists, and colleagues), and extracting (using the card catalogue). Miriam , et al (2004) noted the following as the major factors limiting the students' appropriate utilisation of the University Library: limited borrowing of the most relevant books in the closed access section; insufficient copies of the relevant information materials (books); out–dated (old) information materials dominating the stock; poorly conducting user education; reliance on manual information retrieval tools which lead to poor filing and slow retrieval; and, limited sensitisation of the library information resources and services.

Padma et. al. (2013) made descriptive study. That was conducted with a sampling population of 50 post graduate students of School of Economics, Madurai Kamaraj University with a specific purpose to trace out their information needs and information seeking behaviour. Findings from the study reviled that most of the respondents use the internet of web pages. They are using the internet daily in the library; most of them use Google as a search engine. users preferred to use internet from library.

Moly (2014) studied on examining the information need and information seeking behaviour of Information Science students in Haromaya University. The researcher mentioned that students

and teachers are seeking information for different purpose. The emergence of web resource changes the seeking behaviour of Haromaya University students and teachers. As T. Mathew Moly reviewed many researchers said that studied the way of students seek information is useful to support and to make them effective.

The study investigated the information needs and seeking behaviour of undergraduate students of Makerere University. A cross-sectional survey was carried out, with samples of respondents from the Department of Biochemistry in the Faculty of Science and the Department of History in the Faculty of Arts. The sample consisted of 104 undergraduate students selected from their first, second, and third year of study. Ellis' six generic information–seeking activities were tested to establish how undergraduate students seek information. The chi-square statistic was used to test the stated hypotheses. The results provide an insight into the factors that influence students information seeking behaviour and the information sources used. The study makes recommendations that could lead to the improvement of students' information seeking behaviour and the use of information resources(Meho & Tibbo, 2019).

Information seeking is a basic activity indulged in by all people and manifested through a particular behaviour. It is also an aspect of scholarly work of most interest to academic librarians who strive to develop collections, services, and organisational structures that facilitate information seeking (Wiberley & Jones, 1987). Mann (1993) notes that most researchers, even with computers, find only a fraction of the sources available to them. He explains that researchers tend to work within one or another mental framework that limits their basic perception of the universe of knowledge available to them. Students, according to him, use a subject disciplinary method that leads them to a specific list of sources on a particular subject. He points out that while this method allows students and researchers to find more specific sources, it is limiting in that they may not realise that work of interest to their own subject appears within the literature of many other disciplines. This impinges on how much they get out of the library system.

Studies conducted among undergraduate students have shown that most of them are inadequate in using libraries. Zondi(1992) for instance, conducted a study among first-year undergraduate students at the University of Zululand, South Africa. The researcher established that the majority of students showed a very low level of competence in the use of a library and displayed poor information seeking patterns. Kamanda(1999) did a similar study at the East African School of Library and Information Science Library, Makerere University, Uganda. He observed that more than half of the students experience problems in locating library information materials. He noted that the majority of them either located materials through browsing the

shelves or sought assistance from library staff, but they did not make full use of the card catalogue. Sendikadiwa(1996) also observed about Makerere University that although the catalogue was the most essential library tool in accessing library collections, it was the most avoided and least consulted by undergraduates. Considering the rapid changes in information provision in the 21st Century with computerised access, digitised information formats, and the plethora of resources on the Internet, the access and retrieval capabilities of users who are traditionally accustomed to manual information library systems is questionable. Atkinson(1997) enumerates these as the circumstances under which it was worthwhile to re-examine issues of user behaviour in academic settings. This study is one small contribution to that end. It seeks to investigate the process undergraduate students' use while seeking information, with Ellis' model as the backbone of the hypotheses to be tested. Ellis' model describes the information seeking activities that a scholar may indulge in, not categorically as steps, but as a set, taken together to explain the components of the information seeking patterns.

In different countries the researchers study about mostly used resources and the purpose of students information seeking, but in Ethiopia there is a gap in this topic area so T. Mathew Moly stands for to find out the important sources used by students and also the purpose of seeking information in Haromay university. The finding revealed that majority of the information science students visit the library every day. The students seek information for study purpose and also to do their assignments. Reference service is the most sought after service from the library. The students seek information from books, journals and Newspapers. There is shortage of reading sources or materials to meet students need so students are not satisfied with the library.Students have lack of knowledge about how to access source.

The other researcher Agarwal (2011) studied that Information Source and its Relationship with the Context of Information Seeking Behaviour. This research aimed to understand the nature of information sources and to propose a way of classifying information source types , to demonstrate the workflow of interaction among different possible elements of context and to place information source within the 'context' of information seeking behaviour as defined by the Contextual Identity Framework

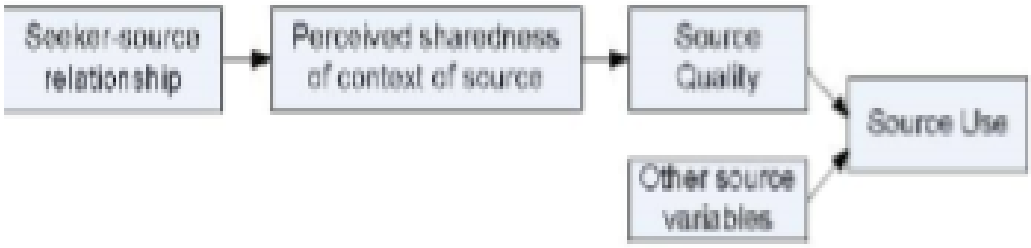


**Figure 1Workflow of interaction among different elements**

The researcher proposed a way of classifying information sources comprehensively that also takes the channel of communication into account. A workflow of interaction among different elements of context was presented. He also saw where information sources could fit within the different views of a seeker's context when s/he is faced with a task that requires searching for information for which the person will need to consult an information source.

A possible framework for future empirical studies exploring the degree of perceived sharedness (which would impact perceived source quality and subsequent usage) has been provided. It is hoped that these models and frameworks will help us better understand information sources in relation to the context of information seeking behaviour, and help lend greater rigour to empirical studies relating to a person's choice of information sources. This also has practical implications for managers and practitioners.

By understanding how three views of context coexist and work in tandem, and where among these views information sources could fit, managers can better place resources such that employees feel them be a part of their shared context (as opposed to context stereotype). E.g. employees with shared norms and similar expertise can be seated together so that they feel a greater level of cohesiveness and develop a feeling of shared context. Employees could also be provided sustained training and support for usage of different systems so that the increase in familiarity helps them develop a degree of familiarity and sharedness for the source.

The framework is also useful for designers of search systems to better understand how context works, and to design search systems (impersonal information sources) such that they are more likely to be placed by a seeker within his/her shared context. This understanding might be one of the first steps towards the design of information seeking search systems that take context into consideration, as opposed to information retrieval systems that are in prevalence today.

The other research conducted by Alexander & Fred( 2010).Create the first version of the customer service model. They believe that there should be some room for improvement of

information. The information being improved by IT supports system in Telecom Company. The researchers in this study develop the model that can describe how it should support the customer service unit with regard to what components are needed and how to use the component to deliver effectively and efficiently. For the purpose of thesestudies, researchers conductedsemi-structured questionnaires.The researchers have divided the overall method into five studies and performed them in a chronological order starting with Customer service representative observations and ending with Interview with Senior IT Architect. They interviewed three experts in the telecom business, and theyperformed observations on the customer service representatives.The result of this study shows that areas which the customer service representative needs information on.

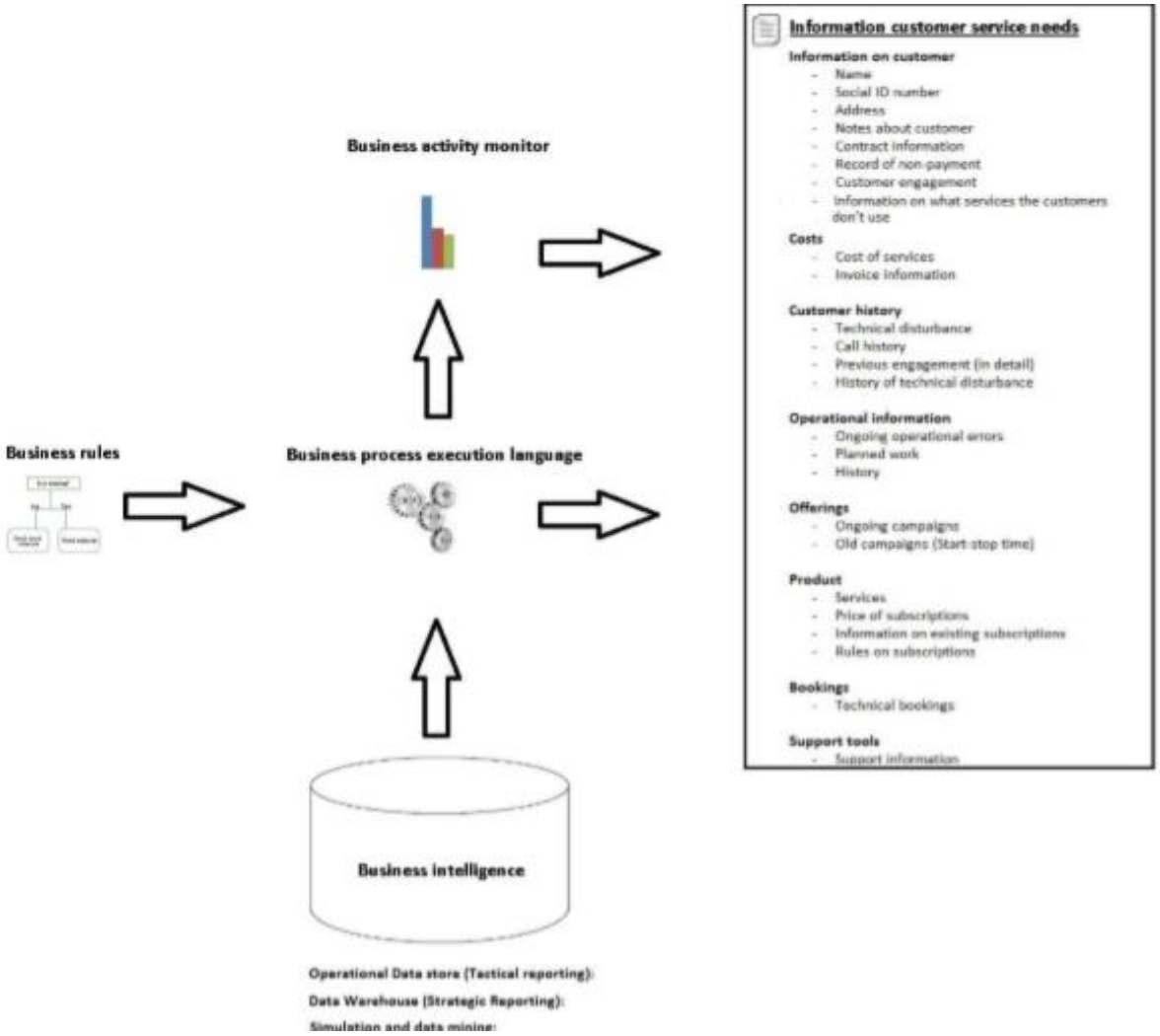


**Figure 2 Model describes the relationship between all the components**

They conclude by combined all the components into a customer service information model. This model describes the relationship between all the components. The BPEL engine is the centre of this model. It executes processes and keeps the information flow going. By using business rules it is easy to change requirements on the data. Through business intelligence the researchers gain insight into customers' profiles, demographic information, support on error handling and close real time customer behavioural patterns. The BAM uses measuring points in this BPEL processes and feeds the operative systems with real-time information on technical disturbances, choke points and sales figures.

By using business rules and business intelligence, the BPEL engine can optimally adapt to customerbehavioural patterns, to make sure the customer service representative gets the most efficient help and information possible. The researcher believes that an advantage of this model is that it can be implemented in specific parts of the IT architecture, and does not have to be used in a large scale. Dynamic service oriented processes with close customer service relations can be pinpointed and tested to ensure its efficiency.

## 2.10 Summary of the Chapter

This chapter has summarized key and pertinent literature on information need and seeking behaviour for different type of users. The review of related literature shows that there are more issues to be studied in order to get more on information need and seeking behaviour for different type of users. This study made the survey to address the research questions from all program levels.

The reviewof literature exhibited that there is lack of conceptualised model used to measure all necessary telecom company user need in relation to provided information. As the researcher tried to show the related work in the last section of this chapter, many of the authors usedthe Wilson model of information need and seeking behaviour.

# 3 METHDOLOGY

This chapter addresses the research methodologies used in this study. The choice of particular research approach and designs, unit of analysis for the study, data type and data source, data gathering techniques and data analysis techniques along with appropriate justification associated witheach approach is uncovered. The pilot study results for the measuring instrument is also presented in this chapter.

## 3.2 Study area

Bahir Dar town is a capital city of Amhara Regional State and it is locatedin the North West part of Ethiopia, which is 565 kilometres far away from Addis Ababa, the capital city of Ethiopia. Its climate is *Woina-Dega* and has many attractive tourism reseources such as Lake Tana, /Blue Nile falls, Lake Tana Island Ethiopian orthodox churches and monasteries, and others. It also has attractive standardised hotels with swimming pools. The town is distinctly known for its wide streets lined with palm trees and variouscolourful flowers. Now a day'sEthio telecom spread its infrastructure to be more accessible. To deliver it service and products the company has 4 shops (Grand shop or shop 1, shop 2, shop 3 and AbayMado shop).

## 3.3 Research Method and Strategy

Quantitative research design was used in the study. Quantitative data is numerical in nature and can be statistically computed. DeFranzo (2011) mention that it is used to quantify attitudes, opinions, behaviors, and other defined variables and generalize results from a larger sample population, it also measurable data to formulate facts and uncover patterns in research. If researcher is playing with the numbers it means he/she have a good knowledge of interpretations of standard deviations, calculation, correlation etc. In this method data collections are done through various forms like online or paper survey, mobile or kiosk survey even some time face-to-face interviews, online pools and telephone interviews are also considered as a part of it. Quantitative data measures use different scales, classified as nominal scales, ordinal scales, interval scales and ratio scales. Often (not always), such data includes measurements of a variable. Quantitative approaches address the 'what' of the program or a variable. It use systematic standardised approach and employ methods such as surveys and ask questions. Quantitative approaches have the advantage that they are cheaper to implement, and

are standardised so comparisons can be easily made, and the size of the effect can usually be measured. Quantitative approachs, however,islimited in its capacity for the investigation and explanation of similarities and unexpected differences. It is important to note that for peer-based programs quantitative data collection approaches often prove to be challengingto implement for agencies as lack of necessary resources to ensure rigorous implementation of surveys and frequently experienced low participation and loss to follow up rates are commonly experienced factors(Taherdoost & Group, 2017).

The quantitative data collection methods rely on random sampling and structured data collection instruments that fit diverse experiences into predetermined response categories. They produce results that are easy to summarise, compare, and generalise. If the intent is to generalise from the research participants to a larger population, the researcher will employ probability sampling to select participants. Typical quantitative data gathering strategies include

- Experiments/clinical trials.
- Observing and recording well-defined events (e.g., counting the number of patients waiting in an emergency at specified times of the day).
- Obtaining relevant data from management information systems.
- Administering surveys with closed-ended questions (e.g., face-to-face and telephone interviews, questionnaires etc.).
- In quantitative research (survey research), interviews are more structured than qualitative research. In a structured interview, the researcher asks a standard set of questions and nothing more. Face-to-face interviews have a distinct advantage of enabling the researcher to establish rapport with potential participants and therefore gain their cooperation.
- Paper-pencil-questionnaires can be sent to a large number of people and saves the researcher time and money. People are more truthful while responding to the questionnaires regarding controversial issues in particular due to the fact that their responses are anonymous.

- The information will be codified and entered into a spreadsheet and analysed using SPSS (statistics package for social science) or any other software. In order to present the data statistical tools are used descriptive statistics namely percentages and frequencies data will he presented by use of tables and charts, mean and standard deviation.

## 3.4 Study Population

Population is all members that fulfil a set of specification to include in the study. In this study, all Ethio telecom active customers in any service and product lines that are based in Bahir Dar town were considered as study population for this study.

According to the 2012 annual report of the company,Ethio telecom has 46.2 million active customersall over the world, of this 82,000 of them are residingin Bahir Dar(Ethio telecom website,2012).

### 3.4.1 Inclusion criteria

All Ethio telecomactive customers who live in BahirDar and visited Ethio telecom shops during the data collection time were the subject of this study.

### 3.4.2 Exclusion criteria

Individualswho are not active customers of Ethio Telecom are excluded from this study.

## 3.5 Sample size determination

Sampling is taking a representative sample from the entire population.There are several approaches to determine the sample size. This includes

1. **Using a census for small population**: this approach is mostly preferred to a small number of population(200 or less).
2. **Using a sample size of similar study**: the other way is usingthe same sample size similar to other papers with your plan.
3. **Using a published table**: the third way to determine sample size is to rely on published tables which provide the sample size for a given set of criteria.
4. **Using a formula to calculate sample size:**although tables can provide a useful guide for determining the sample size, you may need to calculate the necessary sample size for a different combination of levels of precision, confidence, and variability.

For the purpose of this study, the researcher used formula to calculate sample size(Taherdoost & Group, 2017).

## 3.6 Sampling method

There are two types of sampling methods.

1. **Non-probability sampling method:**Non-probability sampling is often associated with case study research design and qualitative research. With regards to the latter, case studies tend to focus on small samples and are intended to examine a real-life phenomenon, not to make

statistical inferences in relation to the wider population (Yin, 2003). A sample of participants or cases does not need to be representative, or random, but a clear rationale is needed for the inclusion of some cases or individuals rather than others.

Types of non-probability sampling

- Quota sampling
- Snowball sampling
- Judgment sampling
- Purposive Convenience sampling

2. **Probability sampling method**: Probability sampling means that every item in the population has an equal chance of being included in the sample. One way to undertake random sampling would be if a researcher wereto construct a sampling frame first and then used a random number generation computer program to select a sample from the sampling frame (Zikmund, 2002). Probability or random sampling has the greatest freedom from bias but may represent the most costly sample in terms of time and energy for a given sampling error level (Brown, 1947). The followings are types of probability sampling,

- Simple random
- Stratified random
- Cluster sampling
- Systematic sampling
- Multi-stage sampling

In this study, systematic random sampling technique was applied to select participants. Systematic sampling is automatically selected according to a predetermined pattern. It is where every nth case after a random start is selected. Almost all of selected participasnts were willing to fill the questioner because customers wait many hours for queues in the shope to gain service so the researcher use this time.

In Bahirdar town Ethio telecom has 4 shops(shope1, shop 2 shop3 andAbayMado shop) on average each shop serve 413,349, 373 and 249 customers per month respectively.

**Table 1 Total respondent's statistics**

| Shops | Average number of customers visit shop per month | Average number of customers visit shop per day |
|---|---|---|
| Shop1(Grand shop) | 12376 | 413 |
| Shop 2 | 10484 | 349 |
| Shop3 | 11200 | 373 |
| AbayMado shop | 8296 | 249 |

The sample size was determined by the 2nd rule of thumb Size Formula, which is 95% confidence with a sampling error of ± 5%.Therefore, the following calculation (for 95% confidence, 5% error). n=385 ÷ ((1+ (385/N))

Where: N, is the total population

So that the total sampled population is calculated as: 385/ ((1+ (385/82000) =385.

In order to choose a systematic sample of size n from a population with N units (Y1,Y2,...,YN), the population is first divided into n groups each of size k units, where k = N/n is called the sampling interval. A random start R is chosen from the first group of k-units. The Rth unit in each of the remaining groups is selected in the sample (Sayed, 2019).

The interval to select respondent is also calculated as: (average handled customers per month/total number of sample population.

Therefore, respondents are selected with 32, 27, 29 and 22 intervals in each shop, respectively.

Ethio telecom use counter to taking the order of customers. The counter generatesa ticket number for each customer. Ticket number starts with one every morning. The researcher used this system generated number to randomly select the participants. Lottery method applied to select the starting point randomly.

For shop 1 the interval was 32, so the researcher write all numbers in a piece of paper and pick randomly after well mixing. The selected starting point was 12;and the second participant was the person hold ticket number 44. At times theperson does not volunteer to fill the questioner, the researcher usesthe next ticket number. For example, if the person with ticket number 44does not volunteer the person with ticket number 45 is selected and again, the interval is continued with 32 interval.

So in the same manner for shop 2 the starting point was 7, for shop 3 the starting point was 3 and for AbayMado shop the starting point was 21.

The number of respondents was determined based on the proportion of the total number of respondents visitedeach shop.

| Shops | Average number of customers visit | Average number of customers visit | Number of the population sampled |
|---|---|---|---|

| | shop per month | shop per day | |
|---|---|---|---|
| Shop1(Grand shop) | 12376 | 413 | 115 |
| Shop 2 | 10484 | 349 | 97 |
| Shop3 | 11200 | 373 | 104 |
| AbayMado shop | 8296 | 249 | 69 |
| Total | 42,356 | 1384 | 385 |

**Table 2 distribution of sample respondents by shop**

## 3.7 Data collection procedure

## 3.8 Study variables

Anything that is measured in research is called a variable . A variable is an object, event, idea, feeling, time period, or any other type of category you are trying to measure . variables broadly fall into two categories: independent variables and dependent variables.

### 1 Dependent variable

The variable that depends on other factors that are measured. These variables are expected to change as a result of analysis manipulation of the independent variable or variables. It is the presumed effect. (Independent variable) causes a change in (Dependent Variable) and it isn't possible that (Dependent Variable) could cause a change in (Independent Variable).

Study dependent variables for this research are

- Types of information needed
- Source of information
- Challenges encountered when seeking for Information

### 2 Independent variable

An independent variable is a variable that stands alone and isn't changed by the other variables when they trying to measure. In fact, when we are looking for some kind of relationship between variables we are trying to see if the independent variable causes some kind of change in the other variables, or dependent variables.

The followings are study independent variables

- Demographic characteristics of the respondents(sex, age, educational level)

- Customer relationship with the company(years of customer experience, information searching habit, etc...)

# 3.9Instrument Development

In order to obtain the required data, a self-administered survey questionnaire was used.

### 3.9.1 Questionnaire

The Survey questionnaire contained 43 questions (see appendix A). It has six sections which were measured by a combination of nominal, ordinal and scales.

In the first Section, demographic information was collected with closed-ended questions (gender, educational level) and open-ended question (age). In the second Section, customer relationship with the company of respondents was collected with closed-ended questions. In the third Section,the type of information needed by the customer were collected with five items Likert- scale type questions.This section is to identify the most preferred type of information. The fourth Section,most preferred source of information, was collected with five items Likert-type with nineteen dimensions. The fifth Section is measured the challenges encountered when seeking for information with Likert-type and has nine-item. The sixth section presents pertinent recommendations for improving customersaccess to information.

# 3.10 Pilot Testing

The questionnaire is pilot tested in order to ensure to capture the required data as expected by the researcher(Junyong, 2017). The test run was conducted mainly to find out whether the questionnaire was clear and understandable as well as whether there were any vague and confusing questions in the questionnaire. 5% of the sample population were approached to answer the draft questionnaire. All the respondents reported that they have no difficulty in answering the questions.

# 3.11 Data Validity and Reliability

Kothari(200) define validityas the extent to which a test measures what we actually wish to measure. It involves the degree, to which we measure what we are supposed to, more simply, it ascertains the exactness of themeasurement. Internal validity in connection to data specify to the capacity of the survey questions to quantify what the researcher plans it to measurement. It refers to the concern that what the researcher finds with the survey is a fair representation of what is being measured (Saunders et al., 2012). To address the issue of content validity, the

instruments used are almost standardised. Majority of survey questions were developed based on the previous researches and review of relevantliterature.Ethio telecom professional experts were also consulted to get a clear picture of products and services.

The survey questions were divided into two sections. Whilesection one is discusses the personal profile of the respondents (biodata),section two is questions related to address the study research questions. This was done with a specific end goal to improve the legitimacy and precision of the data from different background of respondents.

### 3.11.1 Reliability

refers to consistency of data. It measures the level of variance of actual results from expected results from the research tool that has been adopted. The tendency towards consistency found in repeated measurements is referred to as reliability. One method of testing for reliability is the internal consistency method. Internal consistency involves correlating the responses to questions in the questionnaire with each other. Saunders et al.(2012) to check the reliability of the instrument Cronbach's coefficient alpha was calculated the result shows 0.801.According to KassuJilcha(2019) the Cronbach's alpha result of 0.7 and above implies an acceptable level of internal reliability. So, the instrument can be considered as a reliable instrument.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .801 | 43 |

**Table 3Reliability Statistics**

## 3.12 Data Analysis

Data from the questionnaires were analysed using the Statistical Package for Social Sciences 22 (SPSS) and the results interpreted by descriptive statistics and factor analysis.

# Chapter Four

# 4 DATA ANALYSIS AND RESULTS

## 4.2Descriptive Statistics

### 4.2.1 Profile of respondents

A total of 385responses were received across 4 Ethio telecom shops in Bahir Dar town.,A surveyscreening process was conducted to ensurethe quality of survey results.This included removing incomplete responses. Accordingly, ,in this study 376 (97%) survey responses are used. In this study, 5% of error rate is tolerated.

As depicted in Table 4 below, distribution of respondents by demographic backgrounds show that out of three hundred seventy-six respondents, 85(22.6%) were females, and 291(77.4%) were males. The mean age was 29.89±7, with minimum and mzimumage of 18 and 52. Majority of the respondents 186(49.5%)werebetween the age of 26-35. The scond largest age group was 18-25 which accounts 31.45 (118/376). Distribution of respondents by educational status suggest that majority of respondents 274(71.8%)has first degree and above. The remaining 26.6% (100/376) of respondents are high school graduates.

| S/N | Variables | Categorisation | Frequency | Percent |
|---|---|---|---|---|
| 1 | Gender | Male | 291 | 77.4% |
| | | Female | 85 | 22.6% |
| 2 | Age | 18-25 | 118 | 31.4% |
| | | 26-35 | 186 | 49.5% |
| | | 36-45 | 56 | 14.9% |
| | | 46 and above | 16 | 4.3% |
| 3 | Education level | High school | 100 | 26.6% |
| | | First degree and above | 270 | 71.8% |

**Table 4 Profile of respondents**

### 4.2.2 Customer relationship with the company

The results revealed that 50.8% (191) of respondents has 6 up to 10 years of customer experience and 85.4%(321) of respondents has information searching experience about Ethio telecom.

They also confirm that 62.2%(234) of respondents view information about the company from 1 up to 3 days per week. However, 65.2%(245) of respondents spent less than one hour to view information and 59%(222) of respondents preferred Amharic language to search information. 44.9% (169) of respondents mostly preferred audio file format to view information.

**Table 5 customer relationship with the company's frequency**

| S/N | Variable | Categorisation | Frequency | Percent |
|---|---|---|---|---|
| 1 | Customer Experience | <1 | 16 | 4.3 |
| | | 1-5 | 46 | 12.2 |
| | | 6-10 | 191 | 50.8 |
| | | >=11 | 121 | 32.2 |
| 2 | Have you ever searched information about Ethio telecom | Yes | 321 | 85.4 |
| | | No | 51 | 13.6 |
| 3 | View information about the company | every day | 49 | 13.0 |
| | | 4-6day | 44 | 11.7 |
| | | 3-1days | 234 | 62.2 |
| 4 | Available amount of time you spent to search for information | less than an hour | 245 | 65.2 |
| | | 1-4 hours | 75 | 19.9 |
| | | 5-7 hours | 7 | 1.9 |
| | | Above 7 hour | 2 | .5 |
| 5 | Most preferred language | English | 109 | 29.0 |
| | | Amharic | 222 | 59.0 |
| 6 | Most preferred format | Text | 135 | 35.9 |
| | | Audio | 169 | 44.9 |
| | | Pictorial | 25 | 6.6 |

### 4.2.3 Types of information needed

According to this study, most frequent respondents need an information very much about broad band internet 53.2%(200);mobile broad band VPN 31.9%(101); business mobile 29.3%(110);hybrid SIM account 29.3%(110); mobile internet 59%(222); EVDO 30.3%(114); billing system 29.3%(159); mobile apparatus 46.8%(176); EthioGebeta 45.7%(172) and general information about the company 56.6%(213). However most of participants need a little information about post-paid mobile 37%(139) and about prepaid mobile 34.3%(129)and also the table revealed that most of respondents did not need information about roaming 38.6%(145); domain name system 30.9%(116); FAX 42%(158); VPN service 31.9%(120) and about CRBT 52.7%(198).

**Table 6 Information need of customers' frequency**

| S/N | Types of information needed | Very Much | A Little | Not at all | No-response |
|---|---|---|---|---|---|
| 1. | Post-paid Mobile | 21%(102) | 37%(139) | 27.4%(103) | 5.6%(21) |
| 2. | Roaming | 11.4%(43) | 10.1%(38) | 38.6%(145) | 37.0%(139) |
| 3. | Domain Name Service | 17.0%(64) | 13.8%(52) | 30.9%(116) | 34.3%(129) |
| 4. | ADSL | 53.2%(200) | 24.2%(91) | 17.0%(64) | 1.6%(6) |
| 5. | Prepaid Mobile | 32.2%(121) | 34.3%(129) | 25.5%(96) | 4.5%(17) |
| 6. | FAX | 18.1%(68) | 24.2%(91) | 42.0%(158) | 12.8%(48) |
| 7. | Mobile Broadband VPN | 31.9%(120) | 22.3%(84) | 26.9%(101) | 13.3%(50) |
| 8. | VPN Service | 26.9%(101) | 19.9%(75) | 31.9%(120) | 17.9%(67) |
| 9. | M2M | 13.6%(51) | 11.7%(44) | 33.5%(126) | 35.6%(134) |
| 10. | Business Mobile | 29.3%(110) | 28.2%(98) | 25.3%(88) | 14.4%(69) |
| 11. | GOTA | 17.3%(65) | 19.4%(73) | 22.1%(83) | 37.2%(146) |
| 12. | Hybrid SIM Account | 29.3%(110) | 28.2%(106) | 25.3%(95) | 14.4%(54) |
| 13. | Mobile Internet | 59%(222) | 23.1%(87) | 6.9%(26) | 6.4%(24) |
| 14. | EVIDO | 30.3%(114) | 22.1%(83) | 25%(94) | 18.6%(70) |
| 15. | Bill payment system | 42.3%(159) | 26.9%(101) | 17.6%(66) | 9.8%(37) |
| 16. | About mobile apparatus | 46.8%(176) | 24.5%(92) | 21.8%(82) | 2.9%(11) |
| 17. | General information | 56.6%(213) | 29.3%(110) | 6.9%(26) | 2.7%(10) |
| | EthioGebeta | 45.7%(172) | 34.3%(129) | 13.6%(51) | 2.9%(11) |
| 18. | CRBT | 20.2%(76) | 16.2%(61) | 52.7%(198) | 5.9%(22) |

### 4.2.4 Source of information

Table 5 illustrate that most of respondents 33.3 %(125) use website to see information about the company service and products and from those participants most of them rarely call to contact centre to get information, however, majority of participants never use IVR (interactive voice response), Self-care and Mass media as information searching mechanism.

**Table 7 Preferred information sources**

| S/N | Source of information | Always | Occasionally (4 – 6 day per week) | Rarely (1 - 3 day per week) | Never |
|---|---|---|---|---|---|
| 1. | Web site | 16%(60) | 33.3%(125) | 33%(124) | 14.9(56) |
| 2. | Contact centre | 13.8%(52) | 18.1%(68) | 47.6%(179) | 14.1(53) |
| 3. | IVR(interactive voice response) | 6.6%(25) | 14.9%(56) | 26.6%(100) | 48.9%(184) |
| 4. | Self-care application | 13.6%(51) | 16.2%(61) | 23.9%(90) | 43.4%(163) |
| 5. | Mass media | 20.7%(78) | 20.7%(78) | 25.3%(95) | 29.5%(111) |

### 4.2.5 Challenges encountered when seeking for information

**Table 8 Challenges encountered when seeking for information frequenc**

| No | What challenges did they face when searching for information | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1. | Availability of information sources | 34.3(129) | 34.8(131) | 16.5(62) | 9.6(36) | 1.9(7) |
| 2. | Lack of awareness about source of information | 20.5(129) | 31.1(117) | 17.6(66) | 22.1(83) | 5.9(22) |
| 3. | Reliability of credibility of the information source | 21(79) | 23.1(87) | 31.1(117) | 15.7(59) | 3.5(13) |
| 4. | Ability of sources to meet information | 23.9(90) | 30.3(114) | 21.5(81) | 16.8(63) | 3.5(13) |
| 5. | Affordability of the information sources | 22.9(86) | 31.4(118) | 20.7(78) | 14.9(56) | 6.6(25) |
| 6. | Difficulty in accessing both print and online material | 23.9(90) | 32.7(123) | 24.2(91) | 10.4(39) | 5.9(22) |
| 7. | Lack of accessibility of sources | 28.7(108) | 35.9(135) | 18.1(68) | 11.2(42) | 3.2(12) |
| 8. | Lack of time | 21.5(81) | 23.1(87) | 24.5(92) | 25(94) | 2.9(11) |
| 9. | Inadequate current information material | 25.8(97) | 27.7(104) | 19.1(72) | 17(64) | 6.9(26) |

Table 8 illustrates that majority of respondents (69.1%) agree with encountered information availability problem, the second most frequent respondents agree with the problem of lack of accesablity of sources, the third mentioned challenge was access printing and online material.

### 4.2.6 Customers' suggestion for improving access to information

The results of the study shows that most respondents (30.5%, 199) believe that the first way to improve access to information is the establishment of information centres. The second most mentioned solution was making information sources readily available, which accounts for 28.4%(185). The third and fourth most mentioned solutions are awareness creation about information sources and making updated information ready for users, in the same order.

| S/N | **Suggestion Frequencies** | Response in percent | Percent of Cases |
|---|---|---|---|
| 1 | Establishment of information centres | 30.5 | 65.7% |
| 2 | Making information sources readily available | 28.4 | 61.1% |
| 3 | Create awareness about information sources | 20.2 | 43.6% |
| 4 | Provide updated information | 20.9 | 44.9% |
| | Total | 100.0 | 215.2% |

**Table 9 customers suggestion frequency**

### 4.1.7 Relationship between independent variables with information searching behaviour

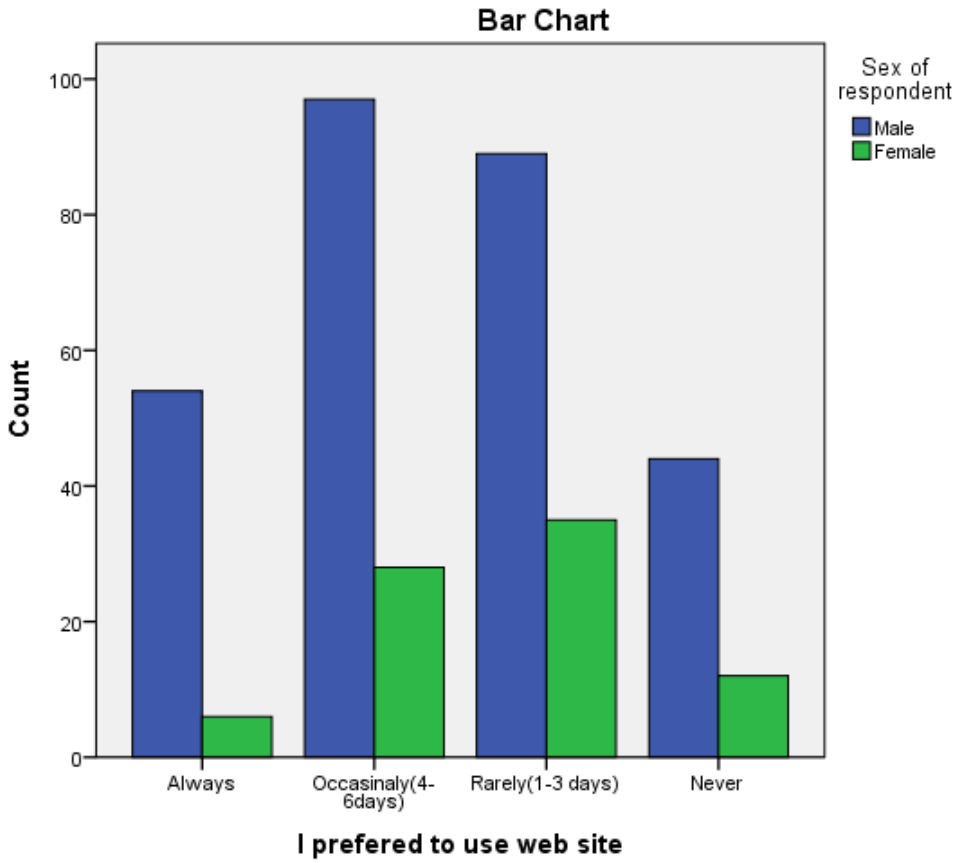


**Figure 3Association of website usage and Sex of respondent**

Association between website usage and Sex of respondent was computed. Figure 3 shows that majority of male respondents preferred to use website *occasinaly*, and the second large number of male respondents preferred website *rarely*, the third and fourth large number of them selecte*never* and *always* respectively. Majority of female respondents prefer website *rarely*, the second most frequent female respondents selecte*occasinaly* and the third and fourth most frequent female respondents preferred to use *never* and *always* respectively.

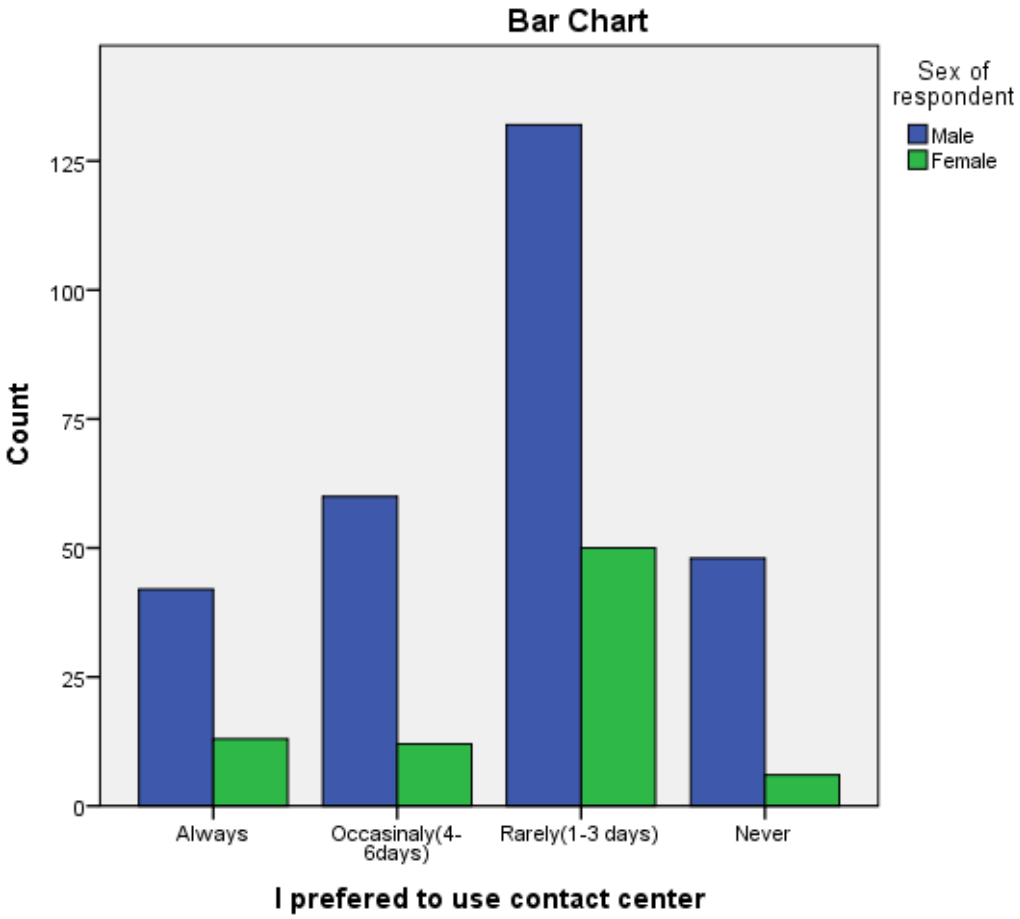


**Figure 4 Association of contact center and Sex of respondent**

Association of contact canter usage and Sex of respondent was computed. Figure 4 illustrates that majority of male respondents preferred to use website*rarely*, the second most of male respondents prefered to use contact center *occasionaly* and the third most male respondents mentioned as they *never* preferred to use contact center. Majority of female respondents preferred to use contact center *rarely*, the second most of female respondents prefered to use contact center *always* and the third most female respondents mentioned as they never prefered to use contact center.

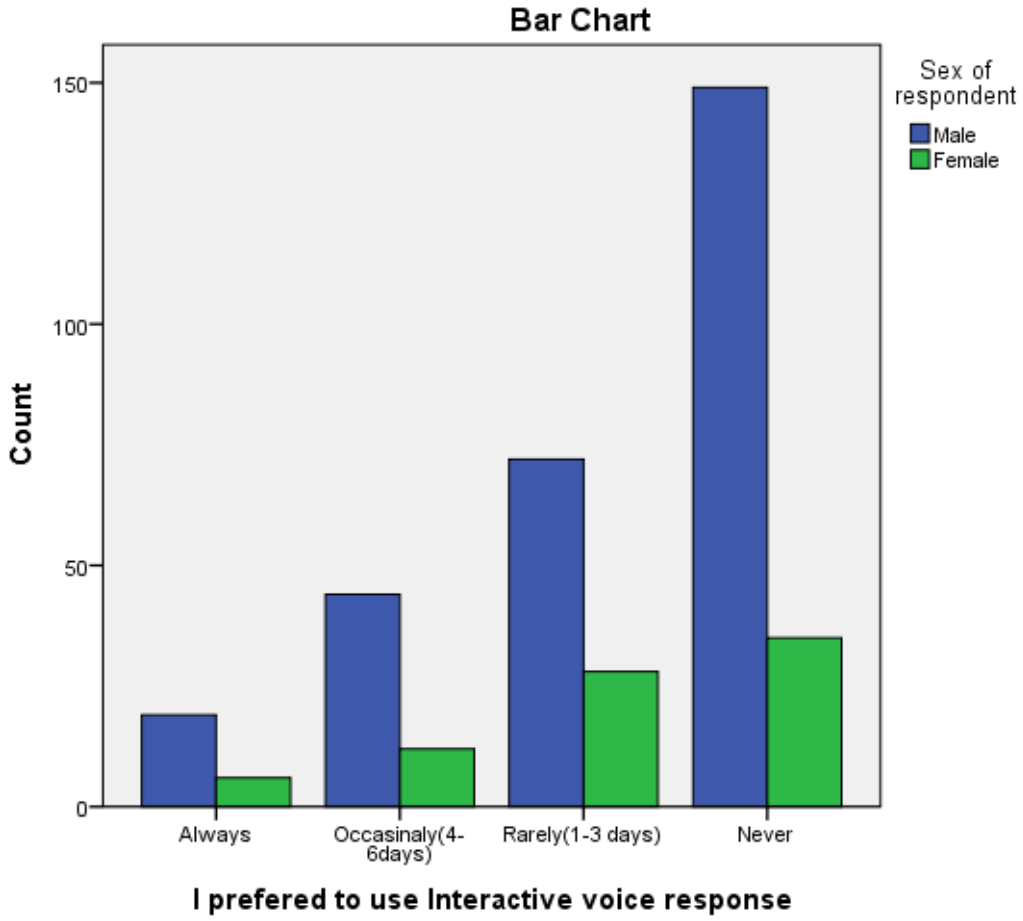


**Figure 5Association of interactive voice responseand Sex of respondent**

Figure 5 shows that association of interactive voice response and sex of respondent. Majority of male and female respondents *never* prefer to use interactive voice response as information source, and the second most female and male respondents prefered to use interactive voice response *rarely* and the third and forth most selected usage interval with male and female respondents is *occasionaly* and *always* respectively.

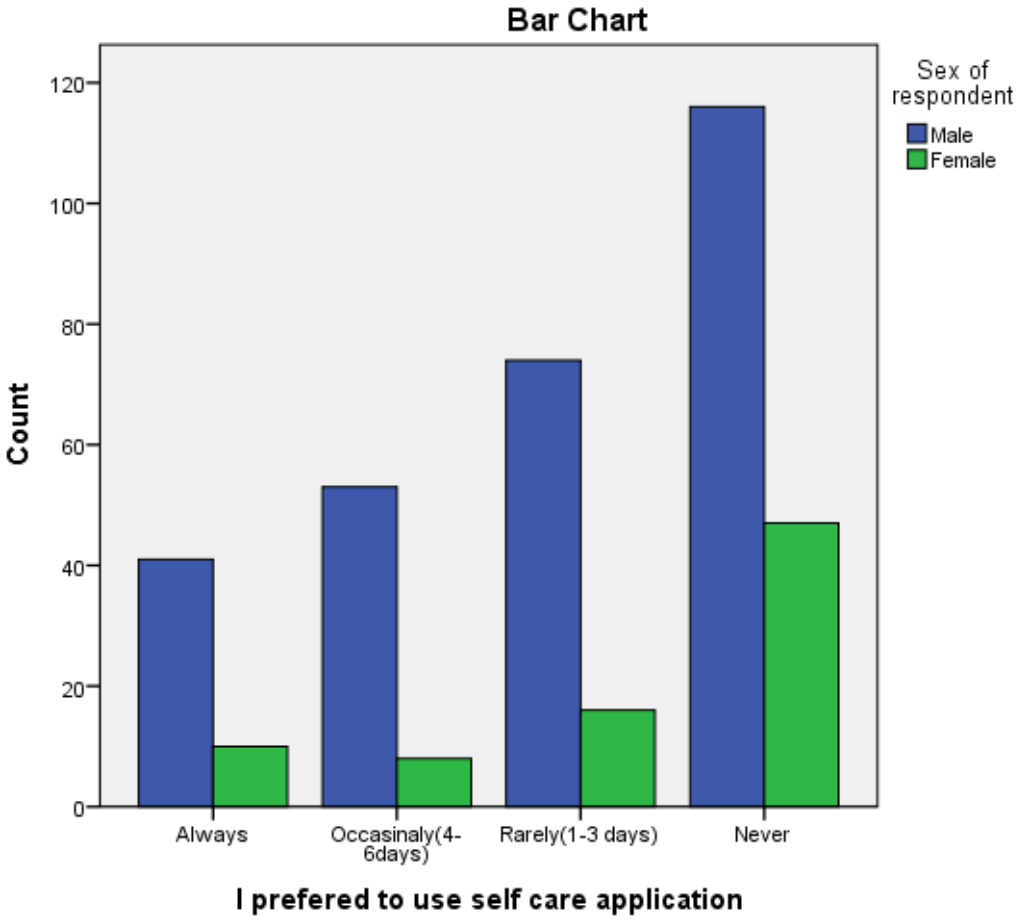


Figure 6Association of self-care application usage with Sex of respondent

figure 6 shows that majority of male and female respondents *never* prefer to use selfcare application, the second most frequent male and female respondents prefer self care application *rarely*, the third most frequent male and female respondents prefer self care application *occasionaly* and last frequent male and female respondents prefer to use self care application *always*.

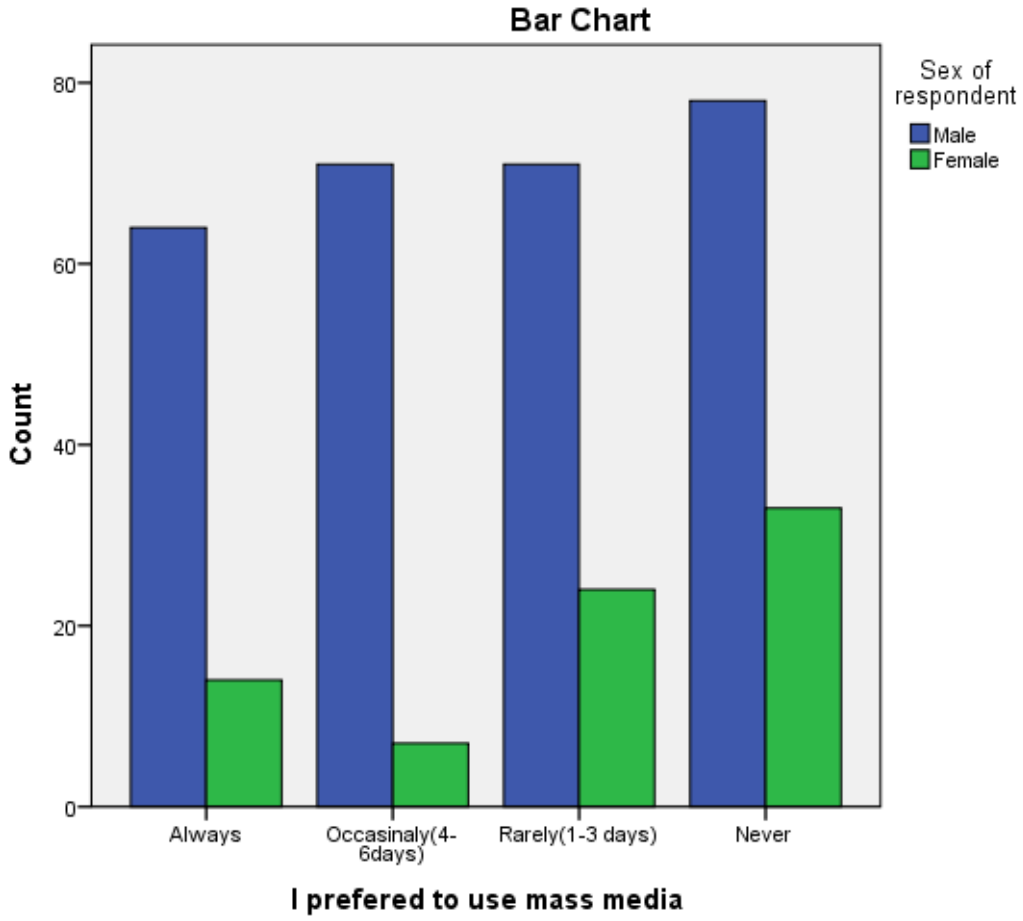


**Figure 7Association of mass media usage with Sex of respondent**

Figure 7 illustrate association between mass media usage with sex. Majority of male and female respondents *never* prefer mass media,the second most frequent male and female respondents prefere to use mass media *rarely*, and the third and last most frequent male and female respondents prefer to use mass media *always* and*occasinaly*respectively.

Generally figure 3, 4 and 6 illustrate that majority of male and female respondents use website, contact centre and self-care application as searching mechanism rarely.Figure 3 and 5show that most frequent male and female respondents never preferred IVR and mass mediaas an information searching mechanism.

Table 10 illustratesthe association between age group and preferred information searching mechanism. Out of 113 respondents in the age group 18-25 majority of respondents preferred to use website(44) and call to call contact centre (66) and most frequent respondent from this age group never preferred IVR(66), self-careapplication(61) and mass media(39). Out of 186 respondents in the age group 26-35 majority of them (82)preferred to use website occasionally, and most frequent respondents preferred to call to contact centre (83) and use mass media (55) rarely, however, most of them never preferred to use self-care application (68) and IVR (83).

Table 10 also shows that out of 52 respondents in age group 36-45, 20 respondents use website, 32 respondents prefer to call to contact centre, and 19 respondents prefer mass media rarely, but they never prefer IVR(27) and self-care application (25). Lastly, the table shows that respondents from age group 46 and above are 14 in number. From the majority of respondents never preferred to use all information seeking mechanisms to search information.

| Variable | Age group | Always | Occasionally | Rarely | Never | Total |
|---|---|---|---|---|---|---|
| Preferred to use web site | 18-25 | 15 | 36 | 46 | 16 | 113 |
| | 26-35 | 29 | 82 | 53 | 22 | 186 |
| | 36-45 | 16 | 7 | 20 | 9 | 52 |
| | 46 and above | 0 | 0 | 5 | 9 | 14 |
| Preferred to call contact center | 18-25 | 10 | 28 | 66 | 9 | 113 |
| | 26-35 | 41 | 32 | 83 | 30 | 186 |
| | 36-45 | 4 | 9 | 32 | 4 | 52 |
| | 46 and above | 0 | 3 | 1 | 10 | 14 |
| Preferred to use IVR | 18-25 | 0 | 19 | 31 | 63 | 113 |
| | 26-35 | 16 | 33 | 54 | 83 | 186 |
| | 36-45 | 8 | 2 | 12 | 27 | 52 |
| | 46 and above | 1 | 2 | 0 | 11 | 14 |
| Preferred to use self-care application | 18-25 | 11 | 19 | 22 | 61 | 113 |
| | 26-35 | 36 | 30 | 52 | 68 | 186 |
| | 36-45 | 3 | 12 | 12 | 25 | 52 |
| | 46 and above | 1 | 0 | 4 | 9 | 14 |
| Preferred to use mass media | 18-25 | 31 | 26 | 17 | 39 | 113 |
| | 26-35 | 37 | 39 | 55 | 52 | 186 |
| | 36-45 | 10 | 9 | 19 | 14 | 52 |
| | 46 and above | 0 | 4 | 4 | 6 | 14 |

**Table 10 Association between preferred information sourcesand the age group**

| Variable | Education level | Always | Occasionally | Rarely | Never | Total |
|---|---|---|---|---|---|---|
| Website | High school | 21 | 11 | 45 | 18 | 95 |
| | First degree and above | 39 | 110 | 77 | 38 | 264 |
| Contact center | High school | 7 | 19 | 57 | 12 | 95 |
| | First degree and above | 46 | 53 | 122 | 37 | 261 |
| IVR | High school | 7 | 7 | 25 | 59 | 95 |
| | First degree and above | 18 | 49 | 75 | 125 | 264 |
| Self-care application | High school | 8 | 12 | 21 | 54 | 95 |
| | First degree and above | 41 | 49 | 69 | 105 | 264 |
| Mass media | High school | 29 | 26 | 17 | 23 | 95 |
| | First degree and above | 49 | 52 | 74 | 86 | 261 |

**Table 11Association between preferred information source and education level**

Table 11 illustrates the association between preferred information source and education level.95 of respondents educational level was complete high school and 264 of them have first degree and above. Most of the respondents with high school education level preferred to use website (45) and preferred to call to contact centre (57) rarely and they preferred to use mass media (29) always. Most frequent respondents with both educational levels never preferred to use IVR and self-care application. However, respondents who have first degree preferred to use website occasionally and respondents who have completed high school use mass media asinformation gaining mechanism always.

### 4.2.7 Relationship between independent variables (educational level and age group) and type of information need of customers

The chi-square test shows that there isa significant association between educational level and some type of information needs of customers that are prepared mobile (chi-square=12.832 df = 3 p=0.005), FAX (chi-square=17.178 df = 3 p=0.001), M2M (chi-square=26.108 df = 3 p<0.001), mobile internet (chi-square= 17.587 df = 3 p=0.001), bill payment system (chi-square=22.856 df = 3 p<0.001) EthioGebeta (chi-square=11.912 df = 3 p=0.008), CRBT (chi-square=19.420 df = 3 p<0.001), business mobile (chi-square=10.668 df = 3 p=0.014), EVDO (chi-square=9.696 df = 3 p=0.021) and Hybrid SIM card (chi-square=9.775 df = 3 p=0.021) but educational level has no evidence of relationship between the remaining type of information needs of Ethio telecom customers that are post-paid mobile (chi-square=3.69 df = 3 p=0.297),

Roaming(chi-square=1.178 df = 3 p=0.758), DNS (chi-square=0.85 df = 3 p=0.837), ADSL (chi-square=1.856 df = 3 p=0.603), mobile broad band VPN (chi-square=1.26 df = 3 p=0.739), VPN (chi-square=5.862 df = 3 p=0.119), GOTA (chi-square=0.673df = 3 p=0.88), Mobile apparatus (chi-square=3.795 df = 3 p=0.284) and general information about the company (chi-square=3.11df = 3 p=0.375)

association between age group and information need of customers were also calculated with chi-square test. The result shows that information need of customer about post-paid mobile (chi-square =44.451 df= 9 p<0.001), domain name system (chi-square =17.989 df= 9 p=0.031), ADSL (chi-square =42.6=861 df= 9 p<0.001), prepaid mobile account (chi-square =44.451 df= 9 p<0.001),FAX (chi-square =43.639 df= 9 p<0.001), VPN (chi-square =21.635 df= 9 p=0.010), M2M (chi-square =27.064 df= 9 p=0.001), business mobile (chi-square =56.108 df= 9 p<0.001), GOTA (chi-square =23.062 df= 9 p=0.006), Hybrid SIM card account (chi-square =26.850 df= 9 p=0.001), mobile internet (chi-square =31.117 df= 9 p<0.001), EVIDO (chi-square =21.853 df= 9 p=0.009), bill payment system (chi-square =23.430 df= 9 p<0.005), general information about the company (chi-square =24.137 df= 9 p<0.004) and CRBT (chi-square =27.137 df= 9 p=0.001) has a significant relationship between Age group. However, respondents information need about roaming (chi-square =16.682 df= 9 p=0.054), mobile broad band VPN (chi-square =14.923 df= 9 p=0.093),mobile apparatus (chi-square =196.378 df= 9 p=0.59) and EthioGebeta (chi-square =13.084 df= 9 p=0.159) has no significant association between age group.

## 4.3 Discussion

The purpose of this study is to identify information need and information searching behaviour of Ethio telecom customers that are lived in Bahirdar town. This helps to the company to delivered information with preferred information searching channel. It also helps to upgrade the information quality based on the customers need. Furthermore Ethio telecom may use this study as a baseline to do other researches about information need and searching behaviour of customers who are lived in other town.

Based on the result the researcher concluded that:

### Profile of respondent

Majority of respondents are male and with age group of 26-30. The result also shows that most frequent respondents have first degree and above but from 376 respondents there is no any respondent with educational level of less than high school. The result shows that based on

collected data when the age and education level of respondents' increase they became customer of Ethio telecom.

### Customer relationship with the company

Majority of respondents has 6 up to 10 years of experience and has a habit of searching information about the company. Majority of participants has an experience to search information rarely and they use less than an hour to see information. Amharic language and audio formats are most preferred with majority of respondents. So this result show that respondents are familiar with the company so they use less than an hour to search information and update themselves. They also want to get information with voice in Amharic language.

### Type of information

The result shows that majority of respondents need an information about broadband internet, mobile broad band VPN, business mobile, hybrid SIM account, mobile internet, EVDO, billing system, mobile apparatus, EthioGebeta and general information about the company, post-paid mobile and about prepaid mobile but majority of respondents did not need information about roaming, domain name system, FAX, VPN service and about CRBT.

### Source of information

Based on collected data majority of respondents preferred to use website and contact centre, occasionally and rarely respectively but majority of respondents never preferred self-care application, IVR and mass media as information searching mechanism. Customer information need are made to understand what customers want before the customers themselves even identify their needs. If it was, for example, known that a customer prefers one particular device to another, the company could then offer right products to the right customer. Understanding the customer has many advantages when communicating with the customers. The customer base in the ethio telecom need to modeled in order to know which customers would most probably be interested about a certain product. This customer scoring method means that customers are ranked so that the person that would most likely be interested about a product is ranked as number one, the second most interested as number two, and so on.

### Relationship between dependent and independent variables

This study shows that majority of male and female respondents use website, contact centre and self-care application as searching mechanism rarely and most frequent male and female respondents never preferred IVR and mass mediaas an information searching mechanism.

Out of 113 respondents in age group 18-25 majority of respondents preferred to use website and contact centre and most frequent respondent from this age group never preferred IVR, self-care

application and mass media. Out of 186 respondents in age group 26-35 majorities were preferred to use website occasionally and most frequent respondents preferred contact centre and mass media rarely, however most of them never preferred to use self-care application and IVR. In age group 36-45, majorities use website, contact centre and mass media rarely, but they never preferred IVR and self-care application. Age group 46 and above totally never preferred to use all information seeking mechanisms to search information.

95 of respondents educational level was complete high school and 264 of them have first degree and above. Most of respondents with high school education level preferred to use web site and contact centre rarely and they always use mass media. Most frequent respondents with both educational levels never preferred to use IVR and self-care application. However respondents who have first degree preferred to use website occasionally and respondents who have completed high school always use mass media as information gaining mechanism

This result also tried to asses about the relationship between information need and education level. Educational level has a significant relationship between information about prepaidmobile, FAX, M2M, mobile internet, bill payment, Ethiogebeta, CRBT, EVDO, hybrid SIM account and business mobile but education level has no significant relationship between post-paid mobile, roaming, DNS, ADSL, mobile broad band VPN,VPN, GOTA, mobile apparatus and general information about the company.

The relationship between age group and information need also calculated. The result shows thatage has significant relationship between information need about post-paid mobile account, DNS, ADSL, prepaid mobile account, FAX, VPN, M2M, business mobile, GOTA, Hybrid SIM account, mobile internet, EVDO, bill payment system, CRBT and general information about the company but this age has no significant relationship between roaming service,mobile broad band VPN, mobile apparatus and Ethiogebeta.

### Challenges encountered when seeking for Information

Majority of respondents agreed with Availability of information sources, Lack of awareness about source of information, Reliability of credibility of the information source, Ability of sources to meet information, Affordability of the information sources, Difficulty in accessing both print and online material, Lack of accessibility of sources, Lack of time, Inadequate current information material are challenges encountered when seeking for information. Customers face internal and external challenges. This finding in line with Jäppinen & Koskinen (2015).

### Customers' suggestion

Majority of respondents suggest that Establishment of information centres is the first ranked suggestion and the second suggestion is making information sources readily available followed by Making information sources readily available and the last ranked suggestion based on

collected data is the to provide updated information this finding also support the finding of Jäppinen & Koskinen (2015). Models of information behaviour do not support all attempts to describe the same set of phenomena or activities: some, as in the case of Ellis are concerned withbehavioural patterns in the actual search activity; others, like Kuhlthau present stages of activity, within which the behavioural patterns may occur. The model presented here is of this second type in that it presents problem solving as the overall framework for the activity of information seeking and shows thatKuhlthau's model may fit within the various stages of the information seekingprocess. We can also suggest that Ellis's behavioural model is a set of activities within what Kuhlthau calls 'collection' and that all three of these are nested within Wilson's(1996) model of information behaviour in general. This analysis of various models leads me to suggest that the various areas of research within the general field of information behaviour may be seen (as intimated above) as a series of nested fields: information behaviour may be defined as the more general field of investigation. With information-seeking behaviour being seen as a sub-set of the field, particularlyconcerned with the variety of methods people employ to discover, and gain accessto information resources, and information searching behaviour isdefined as asub-set of information-seeking, mainly concerned with the interactionsbetween information user (with or without an intermediary) and computer-basedinformation systems, of which information retrieval systems for textual data maybe seen as one type.

We might also extend the nested model further by showing that informationbehaviour is a part of human communication behaviour: given the amount ofinformation-related research in various aspects of communication studies, such asthat on consumer behaviour, it may be instrumental to remember this in specific contexts.

The focus of studies in information behaviour is on the information seeker ofknown or unknown communications, while, although the communication recipient is considered in research in communication studies, there is also a strong focusupon the communicator and the channels of communication. So, while attention isdrawn to the connection here, Figure 1 does not include communication studies as an all-embracing field. However, we can show the general relationship between communication and information-seeking behaviour.

The diagram simplifies Figure 2, renames information sources 'channels ofcommunication', links the basic model to the communicator as the originator ofmessages over the channels of communication and shows afeedback loop throughwhich the communicator learns of the recipient's response to the communication.

Enlarging the original model in this way enables us to link the two fields and mayenable us to identify and consider relationships in the information-seeking processthat have not had detailed treatment in information science research.

We can also suggest that the areas in interact with the field of human-computer interaction (HCI), as indeed they must and, because HCI is concerned with all aspects of human and computer interaction, including computer-based information retrieval, we can perceive it as a related field that intersectswith communication behaviour and its sub-fields.
Researchers in the various fields may use this nested model to remindthemselves that the study of a particular topic needs to be undertaken in the context of the surrounding field: thus, information searching should be explored withan understanding of information seeking and the latter with an understanding of information behaviour in general. We can also argue that research may concernitself with one of these fields, as a central subject for investigation, but also that an investigation could, in fact, explore the relationships across the fields.

## CHAPTER FIVE

# 5 CONCLUSIONS AND RECOMMENDATIONS

## 5.1 CONCLUSIONS

This study examined the information need and information seeking behaviour of Ethio telecom customers. Ethio telecom customers that are residing in Bahir Dar have 6 up to 10 years of customer experience. They have a trained of search information about the company and they need most of information types that are provided with the company except roaming, domain name system, FAX, VPN service and about CRBT.

The study revealed that website and contact centre are preferred information channels, but self-care application, IVR and mass media are not preferable .

Availability of information sources, Lack of awareness about source of information, Reliability of credibility of the information source, Ability of sources to meet information, Affordability of the information sources, Difficulty in accessing both print and online material, Lack of accessibility of sources, Lack of time, Inadequate current information material are Challenges encountered when seeking for Information.

To get information easily and to satisfy with provided information Establishment of information centres is the first solution and the second solution is making information sources readily available. The third and last solutions that are suggested by customers are Create awareness about information sources and Provide updated information respectively.

## 5.2 Recommendation

Based on the findings of the study the researcher put some recommendations for the company and future reaserch on this topic area.

**Recommendation For the company**

- There should be strong initiation or awareness creation among all Ethio telecom customers about information provided by the company and about information channels.
- The company needs to deliver updated information with preferred information sources.
- The company should work on availability of information sources.
- The company should also work on promotion about products that a majority of respondents did not need to know about.

- Ethio telecom need to work on web site quality and accessablity because majority of respondents in age group, sex and education level preferred to use web site as an information source.

## 5.3 Future Work

This study, however has several weaknesses. First, the use of descriptive analysis did not produce many significant findings. Second, on this study because of the population size and with budget constraint, the research could not be representative of all Bahirdar town Ethio telecom customers. the sample size of the study was limited to only four shops of ethio telecom in Bahir Dar town,so the study is recommended to do with a representative sample population and this topic is needed in other regions to explore information needs and seeking behaviour of Ethio telecom customers. Third, service and products listed in this study is also limited. Based on these limitations, the researcher would like to propose refinements to future research. Instead of using Descriptive statistics, perhaps future research should consider the regression and correlation analysis between each factors.

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# Appendices

## Appendix A: survey questionnaire

Dear Respondent,

I am MuluneshBelew, currently graduate student in Addis Ababa University intheDepartment of Information Science.

The aim of this study is to identify information seeking behaviour and interest of Ethio Telecom customers.

This research is being conducted on Ethio Telecom customers.As a user of EthioTelecom service and products, you have a great role to improve the company way to deliver information for the customer because as a customer you have a right to get full information about the company service and product before and after use.

Thank you in advance for kindly participating in this questionnaire!

If you have any confusion in completing this questionnaire, please ask data collectors:

**Tel:** +251904581818

**Email:**mullub2005@gmail.com

**SECTION ONE - Demographic characteristics of the respondents**

Please circle your answer for the questions below.

1. Sex

a. Male b. Female

2. How old are you in years?_____

3. Educational level

a. No formal (*None*) c. High school

b. Elementary (*primary*) d. First degree and above

**SECTION TWO - Customer relationship with the company**

4. your customer experience

a. Less than a year
b. 1 –5 years
c. 6– 10 years
d. 11 and above

5. Have you ever searched information about EthioTelecom?

a. Yes
b. No

If your answer on question number 5 is yes, please answer the below questions.

6. View to an information about EthioTelecom

a. Every day
b. 4 –6 days per week
c. 1- 3 day per week

7. Please indicate that the available amount of time you spent when you see an information about the company

a. less than an hour
b. 1 – 4 hour
c. 5– 7 hour
d. above 7 hour

8. Most preferred language for information search

a. English
b. Amharic
c. Tigrigna
d. Oromifa
e. Somali

9. Most preferred format for information search about the company

a. Text
b. Audio
c. Pictorial
d. Other, please specify.....

**For the following three sections please respond by placing check mark (√) in the answer column that correspond to your response.**

**SECTION THREE - Types of information needed**

| No | I would like to know about..... | Very Much | A Little | Not at all | Non response |
|---|---|---|---|---|---|
| 19. | Post-paid Mobile | | | | |
| 20. | Roaming | | | | |
| 21. | Domain Name Service | | | | |
| 22. | ADSL | | | | |
| 23. | Prepaid Mobile | | | | |
| 24. | FAX | | | | |
| 25. | Mobile Broadband VPN | | | | |
| 26. | VPN Service | | | | |
| 27. | M2M | | | | |
| 28. | Business Mobile | | | | |
| 29. | GOTA | | | | |
| 30. | Hybrid SIM Account | | | | |
| 31. | Mobile Internet | | | | |
| 32. | EVIDO | | | | |
| 33. | Bill payment system | | | | |
| 34. | About mobile apparatus | | | | |
| 35. | General information | | | | |
| 36. | EthioGebeta | | | | |
| 37. | CRBT | | | | |
| 38. | Other, please specify..... ..... | | | | |

**SECTION FOUR - Source of information**

| No | I prefer to use.... | Always | Occasionally (4 – 6 day per week) | Rarely (1 - 3 day per week) | Never |
|---|---|---|---|---|---|
| 6. | Web site | | | | |
| 7. | Contact centre | | | | |
| 8. | IVR (interactive voice response) | | | | |
| 9. | Self-care application | | | | |
| 10. | Mass media | | | | |
| 11. | Other, specify..... .... | | | | |

**SECTION FIVE - Challenges encountered when seeking for Information**

| No | What challenges did you face when searching for information | Strongly Agree | Agree | Neutral | Disagree | |
|---|---|---|---|---|---|---|
| 1 | Availability of information sources | | | | | |
| 2 | Lack of awareness about source of information | | | | | |
| 3 | Reliability of credibility of the information source | | | | | |
| 4 | Ability of sources to meet information | | | | | |
| 5 | Affordability of the information sources | | | | | |
| 6 | Difficulty in accessing both print and online material | | | | | |
| 7 | Lack of accessibility of sources | | | | | |
| 8 | Lack of time | | | | | |
| 9 | Inadequate current information material | | | | | |
| 10 | Other, specify..... | | | | | |

**SECTION SIX - Customers' suggestion for improving their access to information**

Please circle your answer for the questions below. (Multipleresponse is allowed)

1. Suggest what can be done to address the challenges you have stated above?

a. Establishment of information centres/libraries that will adequately cater for customers
b. Making information sources readily available
c. Work on create awareness about information sources
d. Provide updated information
e. Other, specify.....

Please feel free to provide additional comments on your information need and seeking behaviour.

_____
_____
_____
_____
_____
_____

Thank you for taking the time to complete this questioner.

ውድ ተሳታፊ፡

ሙሉነሽ በለው እባላለሁ፡፡በአዲስ አበባ ዩኒቨርሲቲ በኢንፎርሽን ሳይንስ (Information Science) ትምህርት ክፍል የማስተርስ ዲግሪ እየተማርኩ እገኛለሁ፡፡ ይህ ጥናት በኢትዮ ቴሌኮም ደምበኞች ላይ የሚሰራ ነው፡፡አላማውም የደምበኞችን መረጃ ፍላጎት እና የመረጃ አፈላለግ ባህሪ መለየት ነው፡፡ እርስዎ የኢትዮ ቴሌኮም ደምበኛ እንደመሆንዎ መጠን የድርጅቱን የመረጃ አቀራረብ ለማሻሻል በኩል ያለዎት ድርሻ ከፍተኛ ነው ምክንያቱም እንደ ደምበኛ የተሟላ አገልግሎት የማግኘት መብት አለዎት፡፡

ማንኛውም አይነት ግልጽ ያልሆነ ነገር ካጋጠመት መረጃ ሰብሳቢወችን መጠየቅ ይችላሉ፡፡

መጠይቁን ስለሞሉልኝ አስቀድሜአመሰግናለሁ፡፡

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ኢሜል:mullub2005@gmail.com

## ክፍል አንድ - የተሳታፊ የግል ሁኔታ

መልስዎን በማክበብ ይመልሱ

10.ጸታ

a. ወንድ
b. ሴት

11.እድሜ፡.....

12.የትምህርት ደረጃ

a. ፊደል ያልቆጠረ
b. አንደኛ ደረጃ ት/ት ድረስ የጨረሰ/ች
c. ሁለተኛ ደረጃ ት/ት ድረስ የጨረሰ/ች
d. የመጀመሪያ ዲግሪና ከዛ በላይ ያለው/ያላት

## ክፍል ሁለት - የደምበኛና የድርጅቱ ግንኙነት

13. ደምበኛ ከሆኑ ምን ያክል ጊዜወት ነው ?

1. ከ1 አመት ያነሰ
2. ከ1 እስከ 5 አመት

3. ከ6 እስከ 10 አመት
4. 11 አመትናከዚያ በላይ

14. ስለ ኢትዮ ቴሌኮም መረጃ ፈልገው ያውቃሉ?

a. አዎ
b. አላውቅም

ለጥያቄ ቁጥር 5 መልስዎት አዎ ከሆነ እባክዎ ከታች የሚገኙትን ጥያቄዎች ይመልሱ።

15.ስለ ኢትዮ ቴሌኮም ምን ያክል ቀናት መረጃ ይፈልጋሉ

a. በየቀኑ
b. በሳምንት ከ4 እስከ 6 ቀን
c. በሳምንት ከ1 እስከ 3 ቀን

16.መረጃ በሚፈልጉ ጊዜ በቀን ምን ያክል ሰአትን ያጠፋሉ

a. ከ 1 ሰአት ያነሰ
b. ከ 1 እስከ 4 ሰአት
c. ከ 5 እስከ 7 ሰአት
d. ከ 7 ሰአት በላይ

17.መረጃ ለመፈለግ ይበልጥ የሚመርጡት ቋንቋ

a. እንግሊዝኛ
b. አማርኛ
c. ትግርኛ
d. ኦሮምኛ
e. ሶማልኛ

18.መረጃ ለመፈለግ ይበልጥ የሚመርጡት የመረጃ ይዞታ

a. የጽሁፍ
b. የድምጽ
c. የምስል
d. ሌላ ካለ ይገለጽ.....

በሰንጠረዡ ውስጥ ለሚገኙ ጥያቄዎች በመልስዎት ረድፍ የ “√ “ ምልክት በማስቀመጥ ይመልሱ።

**ክፍል ሦስት - የሚፈልጉት የመረጃ አይነት**

| ተ.ቁ | ማዎቅ የምፈልገው ስለ..... | በጣም እፈልጋለሁ | ትንሽ እፈልጋለሁ | አልፈልግም | መልስ የለኝም |
|---|---|---|---|---|---|
| 39 | ድህረ ክፍያ ሞባይል | | | | |
| 40 | ሮሚንግ | | | | |
| 41 | ዶሜን ኔም ለአገልግሎት | | | | |
| 42 | ብሮድባንድ ኢንተርኔት | | | | |
| 43 | ቅድመ ክፍያ ሞባይል | | | | |
| 44 | ፋክስ | | | | |
| 45 | ሞባይል ብሮድባንድ ቪፒኤን | | | | |
| 46 | ቪፒኤን(VPN) አገልግሎት | | | | |
| 47 | ኤም 2 ኤም(M2M) | | | | |
| 48 | ቢዝነስ ሞባይል | | | | |
| 49 | ጎታ አገልግሎት | | | | |
| 50 | ድህረ ክፍያና ቅድመ ክፍያ ድብልቅ ሲም አገልግሎት | | | | |
| 51 | ሞባይል ኢንተርኔት | | | | |
| 52 | ኢቪዲኦ(EVDO) | | | | |
| 53 | የሂሳብ መክፈያ ዘዴ | | | | |
| 54 | ሞባይል ቀፎ | | | | |
| 55 | ጠቅላላ መረጃ | | | | |
| 56 | ኢትዮ ገበታ | | | | |
| 57 | የጥሪ ማሳመሪያ | | | | |
| 58 | ሌላ ካለ ይጠቀስ..... | | | | |

**ክፍል አራት - የመረጃ ምንጭ**

| ተ.ቁ | ለመጠቀም የምመርጠው..... | ሁልጊዜ | አልፎ አልፎ(በሳምንት ከ4 እስከ 6 ቀን) | ከእለታት አንድ ቀን(በሳምንት ከ1 እስከ 3 ቀን) | ፈጽሞ |
|---|---|---|---|---|---|
| 12 | ድህረ ገፅ | | | | |
| 13 | የጥሪ ማእከል | | | | |
| 14 | በድምፅ የተዘጋጀ | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | መልስ መስጫ(IVR) | | | | |
| 15 | ራስ አገዝ | | | | |
| 16 | መገናኛ ብዙሃን | | | | |
| 17 | ሌላ ካለ ይገለጽ..... | | | | |

**ክፍል አምስት - መረጃ በሚፈልጉ ጊዜ ያጋጠሙ ችግሮች**

| ተ.ቁ | መረጃ በሚፈልጉ ጊዜ ምን አይነት ችግሮች አጋጠመዎት | በጣም እስማማለሁ | እስማማለሁ | ገለልተኛ | አልስማማም | በጣም አልስማማም |
|---|---|---|---|---|---|---|
| 10 | የመረጃ ምንጮችን የማግኘት | | | | | |
| 11 | ስለ መረጃ ምንጮች ግንዛቤ አለመኖር | | | | | |
| 12 | የመረጃ ተአማኒነት | | | | | |
| 13 | የመረጃ ምንጮች መረጃ የማቅረብ ችሎታ | | | | | |
| 14 | የመረጃ ምንጮች ዋጋ ተመጣጣኝ አለመሆን | | | | | |
| 15 | መረጃ በ ህትመት ውጤትና በቀጥታ ከበየነ መረብ የማግኘት ችግር | | | | | |
| 16 | የመረጃ ሰጭ ተቋማት በቂ አለመሆን | | | | | |
| 17 | የጊዜ እጥረት | | | | | |
| 18 | መረጃ የመፈለጊያ ቁስ እጥረት | | | | | |
| 19 | ሌላ ካለ ይገለጽ..... | | | | | |

**ክፍል ስድስት - የደምበኛ ሀሳብ**

መልስዎን በማክበብ ይመልሱ

2. ከላይ የጠቀሱአቸውን መሰናክሎች ለመቅረፍ ምን መደረግ አለበት ይላሉ
    1. ለደምበኞች በቂ መረጃ ሚያቀርብ የመረጃ ማዕከል መመስረት
    2. የመረጃ ምንጮችን ዝግጁና ተደራሽ ማድረግ
    3. ስለመረጃ ምንጮች ግንዛቤ የማስጨበጥ ስራ መስራት
    4. የተሻሻለ መረጃ ማቅረብ
    5. ሌላ ካለ ይገለጽ.....

**የመረጃ ፍላጎት እና የመረጃ አፈላለግ ባህሪዎን በተመለከተ የተለየ አስተያየት ካለዎት እባክዎ ይግለፁ**

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**ስለትዎን ሰውተው መጠይቁን ስለሞሉልኝ አመሰግናለሁ፡፡**